

Aktioun vum Ministère fir Ëmwelt, Klima a Biodiversitéit mat de Gemengen, der Chambre des Métiers an der Chambre de Commerce

SDK RESSOURCEN
INNOVATIOUN
NOHALTEGKEET
CIRCULAR ECONOMY
SuperDrecksKëscht®



Geliefte Klimaschutz

SuperDrecksKëscht® fir Betriber - Ecological waste-management based on the SDK® model

Information on :

sdk.lu

Contact :

info@sdk.lu

SDK - climate protection in practice



Information on the prevention, collection and recovery of waste products, as well as the certification of the label ,SDK fir Betriber‘

Save money by safely, sustainably and lawfully managing waste products



Separate collection of materials and the avoidance of wastage - the two go together

Dealing with waste places high demands on the producers of the material concerned. Current national legislation covering waste management, which dates from 6th June 2022, and the national zero waste strategy explicitly makes commercial organisations responsible for observing the EU hierarchy of waste. Prevention and reuse are the top priorities in waste management. Next comes material recycling for the circular economy, before any other processing (e.g. energy recovery) or final disposal. Not only is intelligent waste management environmentally-friendly and sustainable, it also helps to save money and therefore boosts competitiveness.

The waste management plan in the company

Our commercial waste-management plan specifically fulfils the following tasks established in article 27, section 2 of the law from 21th of March 2012 on waste management:

- a) *The use of procedures and products designed to avoid the creation of waste ;*
- b) *Separate collection of different fractions of waste to ensure their maximum recyclability;*
- c) *Recycling or disposal of different fractions of waste in plant systems that use the best technology available;*
- d) *Documenting procedures designed to ensure the transparent tracking of waste-flows;*
- e) *Training and consciousness-raising for personnel involved in waste management.*

How can a commercial organisation whose main interest is not in the management of waste, but rather in the manufacture of products or the delivery of services, start fulfilling these requirements?

This is where the expert consultations provided by the people at SuperDrecksKëscht® fir Betriber, count – for site operators, commercial enterprises and institutions that require permanent access to free advice and long-term support in their efforts to ensure the practical implementation of a waste-management plan.

The partners in the initiative of the Ministry of the Environment, Climate and Biodiversity, which has been running successfully since 1992, are the Luxembourg chambers of trade and commerce. The services of SuperDrecksKëscht® fir Betriber (for site operators) offer important help to them as they implement Luxembourg's country-wide plans for waste management and sustainable development, both of which aim to create an environmentally sound and energy/resource-efficient economy. This means climate protection practiced.



EU hierarchy of waste

We have the right solutions - regardless of whether the waste is commercial, industrial or domestic



Expert advice for ecological waste-management

The **SuperDrecksKëscht® fir Betriber** commercial range is aimed at all the different participants in the economy of Luxembourg, whether they are businesses or institutions or in the public or private sector. Examples include industry, catering and tourism, the banking sector, government agencies and schools. Agricultural businesses are also now increasingly using our range. There are special schemes for construction sites or communal housing facilities (residences). These schemes are embedded in our wider national activities, such as the Climate Pact or the National Label for Sustainable Construction (LENOZ).

What does SuperDrecksKëscht® fir Betriber free consultation consist of ?

- Waste-management concepts for companies
- Specific advice in the area of waste avoidance and reduction
- Individual plans for the selective collection of all waste products
- Clean, safe storage for all waste products
- Training and motivating employees for correct behaviour and handling of waste products
- Information on the transparent tracking of product-flows for the purposes of resource-efficient recycling, use and disposal
- Documentation and the drawing-up of “waste balance sheets”
- Improved work safety by separate and safe storage of waste

What can you do as the person in charge ?

- Ask about a **SuperDrecksKëscht® fir Betriber** consultation for your waste-management system.
- Draw up and implement a waste-management plan. This is a sustainability measure that helps reduce your costs.
- Involve your employees in the implementation of your waste-management plan. Motivated employees are your guarantee of quality and continuity.
- Advertise on the basis of your environmentally-sustainable policies. Stress the ground-breaking credentials of your organisation in this respect.

SuperDrecksKëscht® considers its role to be to neutrally pass on expertise and it closely collaborates with all parties and interest groups involved. For example, these include the Fédération des Artisans [Federation of Craftspeople] (FDA), the Luxembourg Confédération [Trade Confederation] (former clc), HORESCA [catering industry], GSPL [housing management consortium], MBR [farm machinery cooperative] and the national producer frameworks (Ecotrel, Ecobatterien).

Information on:
sdk.lu

Contact:
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Our seal of quality confirms our competitiveness



Official hand over of the label for sustainable handling of resources

SuperDrecksKëscht® fir Betriber (for site operators) bears the seal of quality for environmentally sustainable handling with resources. This is awarded by the Luxembourg Ministry for Sustainable Development and Infrastructure, acting in conjunction with the country's chambers of trade and commerce. The label certifies conformity with the international standard ISO 14024:2018, which establishes the inspection procedures and requirements that test organisations must observe.

How to obtain the label SuperDrecksKëscht® fir Betriber ?

Its criteria include the implementation of preventive measures, the separate collection of all materials and the environmentally sustainable storage and processing of the products concerned by an authorised disposal organisation that guarantees high standards of practice and transparent disposal procedures. This is in addition to an environmentally aware approach to management; i.e. one designed to keep employees involved and informed, while taking environmental targets into account when selecting suppliers and service providers. Waste management must be correctly documented to ensure that it can be clearly tracked. This includes logging evidence of environmentally sustainable processing, while maintaining a “quantity balance sheet” of the individual substances involved.

Fulfilment of the label criteria is verified annually, and confirmed by the issuing of the corresponding certificate. Once an organisation has fulfilled the criteria on five consecutive occasions, it is awarded with a diploma and inspected only at two-year intervals thereafter. This confirms that the organisation concerned has adopted a committed and responsible approach to environmental issues.

What are the advantages of obtaining SDK fir Betriber quality accreditation ?

The economic aspect

- The use of better-quality products, which therefore have a longer service life
- The avoidance of waste and subsequent reduction in the costs of disposal
- A seal of quality that can be exploited for advertising purposes
- Customer loyalty built on trust
- Improved monitoring of operating procedures

The ecologic aspect

- Conservation of resources through waste prevention and waste treatment in high-quality recycling channels
- Contribution to the circular economy
- Active climate protection through intelligent waste management

The legal and social aspect

- Permanently verifiable methods of disposal
- Employee health and safety
- Safe and environmentally sustainable storage of hazardous substances

The quality label permits sustainable further development in the sense of resource efficiency and responsibility to future generations. The quality label, which conforms to ISO 14024:2018, constitutes an important part of the certification process for organisations and institutions that have already implemented a quality-control or environmental management system.

The key to sustainability is the successful prevention of waste



RINSE-OFF PRODUCTS



SCHOOL AND OFFICE MATERIAL



DETERGENTS AND CLEANING PRODUCTS



PAINTS, LACQUERS AND VANISHES



RECHARGEABLE BATTERIES AND ACCESSORIES



LOW ENERGY LAMPS (LAMP & LIGHTING)



HYGIENE PAPER PRODUCTS



The prevention of waste is a top priority at both a national and European level. Why? The reasons for this are obvious. Waste that does not exist in the first place has no environmental impact or economic cost.

What does waste prevention mean ?

Luxembourg's 2012 Waste Act modified 2022 defines prevention as the following :

- measures to reduce the volume of waste, including the re-use or life-time extension of products
- measures to reduce the damaging effects of the waste generated on the environment and human health
- measures to reduce the pollutant content of substances and products

Under the waste management scheme, the advisor and the manager work together at the site to assess what prevention measures can be achieved. Examples include using returnable systems or using washable textiles or refillable pump sprays rather than aerosol cans.

Prevention also means processing for continued use. For example, repairing pallets or re-using packaging materials for your own packaging purposes.

SuperDrecksKëscht® tests and promotes environmentally-friendly products with a view to protecting the environment and public health and reducing pollutants. The 'Shop Green' campaign is primarily aimed at private consumers, but businesses can benefit from it too when they obtain products from their suppliers. There are lists of designated products for certain product categories such as cleaning materials and office materials.

Other product categories promoted by the 'Shop Green' campaign are single-use or rechargeable batteries, lamps, paints/lacquers/vanishes, rinse-off products (body care) and sanitary paper products.

What are the advantages for your organisation ?

Waste-avoidance initiatives make themselves felt, sooner or later, in a positive bottom line. This benefits both the environment as a whole and your organisation in particular.

The product information for **SuperDrecksKëscht®** and your individual waste-management concept both contain detailed tips on how to avoid waste and reuse existing materials. These tips are provided free of charge to all associated organisations.

Information on:

sdk.lu

Contact:

info@sdk.lu

Information on:

shop-green.lu

Circular Economy and resource potential - new opportunities for Luxembourg's Economy



Information on:
resources-potential.com

Circular Economy as an element of sustainable development

With their national studies on the Circular Economy and the third industrial revolution (the Rifkin Study), Luxembourg's political leaders are seeking to lay the foundations for sustainable development of the country's economy. Responsible use of the available resources is a major part of this. This does not mean merely using fewer natural resources - it also means reclaiming as much as possible of the raw materials contained in waste. With resource potential, SuperDrecksKëscht® has built a new, innovative tool to measure this.

Circular Economy

In a world with finite raw materials, sooner or later the non-renewable raw materials currently used as starting materials for new products will run out. In a Circular Economy, the aim is to reclaim as much as possible of the raw materials after the life cycle of a product or item for the production of new products. However, Circular Economy also means saving energy and therefore combating climate change.

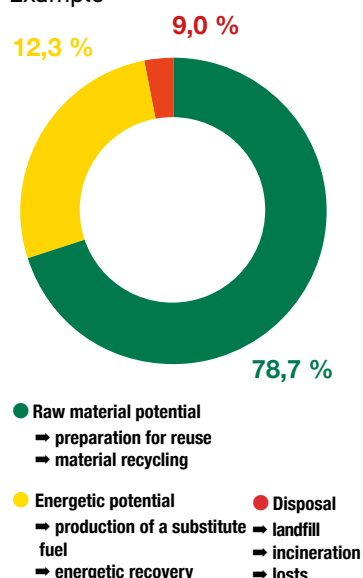
The resource potential SDK

Resource Potential is a method for measuring the efficiency of recycling processes/reverse production. A pie chart can be used to clearly illustrate which components of any waste product are available to be re-used as a raw material after recycling. The larger the green proportion is, the better. This makes it possible to measure and compare recycling processes/reverse production based on how effective they are (how large the green proportion is).

Their Resource Potential therefore represents the recycled raw materials contained within the product, making old products sources of raw materials. The resource potential calculation is only concerned with what is actually left in terms of new raw materials at the end of the recycling process/reverse production.

To make the « circular economy » a reality, it is important to have clean, sorted collection of waste products. Clean waste collection also contributes towards having a positive image and is motivating for both employees and customers. It is very much at the heart of the philosophy driving reverse consumption, which means inverting the arrangements for the collection of waste (i.e. old products) to reflect the criteria of consumption.

Example



Product overview

with information and tips on how to avoid and reduce waste, along with guidelines for proper disposal and recycling



Batteries, hydraulic fluids and electrical/electronic devices



Info

- These contain valuable metals.
- They can also contain pollutants.
- The collection of scrap items of equipment and used batteries is organised by the producer-managed systems Ecotrel asbl and Ecobatterien asbl.
- Properly-managed disposal is of great importance, given the valuable materials that these items contain.

Saving resources while avoiding waste

- ➔ Help minimise energy consumption !
- ➔ Pay attention to reparability!
- ➔ Use rechargeable batteries !

- ➔ High quality means a long service life.
- ➔ Help to minimise pollutants and electromagnetic radiation.
- ➔ Check for the eco-labelling !
- ➔ Use "green" energy!

Environment-friendly recycling

- Adopt pre-sorting and classification as the first step in recycling
- Recovery of metals and plastics
- Problematic elements are properly disposed of
- Certain toner-cartridges can be refilled.

Useful addresses :

- www.ecobatterien.lu
- www.ecotrel.lu
- www.ulc.lu
- www.oeko.lu
- www.oekotopen.lu
- www.akut.lu

www.shop-green.lu



Information on the resource potential on www.resources-potential.com

Building-site waste



Info

- Construction materials should have a long service life.
- Proper insulation reduces consumption of heat energy.
- Use energy-efficient building technology.
- Consider eventual rebuilding, and even demolition, at the planning and construction stage.

Saving resources while avoiding waste

- ➔ Avoid composite materials and tape up, as this makes dismantling and recycling easier.
- ➔ Avoid harmful-substance impurities (such as oil and paint).
- ➔ Insulation made of natural or recycled material is more environment-friendly.

- ➔ Always opt for low-waste alternatives.
- ➔ Reusable packaging materials are often available.

Environment-friendly recycling

- Mixed waste is difficult to recycle and expensive to dispose of.
- Keep collection clean and separate.
- Mineral-based construction materials are easy to recycle.
- Problematic waste substances such as bitumen need to be handled separately.

Useful addresses :

- www.sdk.lu/de/Bau.html
- www.sdk.lu/fr/construction.html
- www.crtib.lu/leitfaden
- www.oeko.lu
- www.akut.lu



Get informed about SDK - LECOBX.



Information on the resource potential on www.resources-potential.com

Glass



Saving resources while avoiding waste

- ➔ Buy drinks in reusable bottles, rather than in cans or disposable containers.
- ➔ Minor damage to vehicle bumpers can be repaired.

Info

- DO NOT mix different types of glass !
- DO NOT contaminate with earthenware, ceramic or similar materials!
- Bottles and drinking vessels can be recycled as glass containers.
- Flat glass can be collected separately, and is likewise easy to recycle.
- Glass light bulbs must be handled separately, especially if they are of a "problematic" type (e.g. energy-saving bulbs).

Environment-friendly recycling

- Properly-sorted glass containers can be converted into a granulate material for use in the production of new bottles and glasses.
- Secondary raw materials obtained from old flat glass can be used to manufacture such items as glass insulating fibre or cellular "foam glass".
- Glass from light bulbs can also be reused in industrial processes.

Product overview

with information and tips on how to avoid and reduce waste, along with guidelines for proper disposal and recycling



Plastics



Useful addresses :
● www.valorlux.lu

Info

- These are normally based on petrochemicals.
- Plastics made from renewable raw materials are not necessarily more environment-friendly than those based on fossil sources.
- They are slow to biodegrade (as manifested in littering, both on land and at sea).
- Components such as plasticizers in PVC are problematic.

Saving resources while avoiding waste

- ➔ Employee reusable packaging materials!
- ➔ Damage to buildings and vehicles can often be repaired.

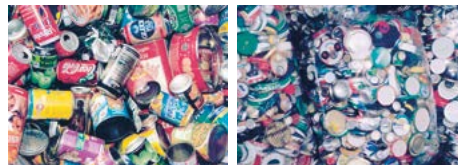
- ➔ The use of recycled plastics conserves resources.

Environment-friendly recycling

- Many plastics are easy to recycle, provided they are carefully sorted and properly labelled.
- Soiled, unidentified and mixed plastics – along with composite materials – can normally be recycled only thermally.

Information on the resource potential on www.resources-potential.com

Metals



Useful addresses :
● www.valorlux.lu

Info

- The mining of metal ores is normally associated with considerable impact on nature and landscapes.
- The extraction of metals from their mineral ores is associated with the consumption of large amounts of energy.
- The extraction of certain metals also involves the use of toxic chemicals.

Saving resources while avoiding waste

- ➔ Natural reserves of metal ores are not inexhaustible.
- ➔ Decomposed (oxidised) metal is released into the environment, from where it is no longer recoverable.

- ➔ Re-utilisation wherever possible (e.g. via a recycled-materials exchange)
- ➔ Avoid the use of cans and tins by buying fresh or employing reusable containers
- ➔ Metal containers with harmful residues lead to accumulations of “problem” substances.

Environment-friendly recycling

- Employ magnets to separate out ferrous metals, or classify by specific weight.
- Smelting of metals for their reuse in industry
- Special handling of containers/packaging made of problematic substances

Colors/paints etc. in metal packaging



www.shop-green.lu

Information on the resource potential on www.resources-potential.com

Organic waste (food residues, garden refuse, wood)



Useful addresses :
● www.biogasverenegung.lu

Info

- Residual refuse contains a high proportion of organic waste.
- The amount of kitchen waste exceeds that of garden refuse, grass cuttings and wood.
- Landfill and indiscriminate incineration are not recommendable methods of waste disposal.

Saving resources while avoiding waste

- ➔ Given the global hunger crisis, the throwing-away of food is not only unethical but also a waste of valuable resources.
- ➔ The recycling of organic waste provides resources for producing energy.



The instrument against food waste and the avoidance of unnecessary packaging. Info on: www.ecobox.lu

Product overview

with information and tips on how to avoid and reduce waste, along with guidelines for proper disposal and recycling



... organic waste

➔ The production and use of compost also contributes to reducing CO₂.

Environment-friendly recycling

- Most of Luxembourg's biogas power plants also use kitchen and food waste.
- This biogas is used to produce heat and electricity, or is fed into the country's natural-gas

network.

- Garden waste and grass cuttings are composted, while wood-based waste is turned into wood chips.
- Wood waste: Used to make wood-based materials, or in the production of energy.

Information on the resource potential on www.resources-potential.com

Paper / Cardboard



Info

- Although wood is renewable and available virtually everywhere, the conscientious handling of this raw material is still important.
- The low weight of paper and cardboard makes them ideal packaging materials.

Saving resources while avoiding waste

- ➔ The recycling of paper reduces the environmental impact of its manufacture, with its high consumption of energy and fresh water. Trees and forests are conserved.
- ➔ Use recycled paper !
- ➔ Reusable containers can help reduce the consumption of packaging materials.
- ➔ Paper and cardboard cartons can often be

reused several times.

- ➔ Print out electronic documents and e-mails only when strictly necessary!

Environment-friendly recycling

- Clean material is easier to recycle.
- Short-fibre paper such as that used in disposable tissues reduces the quality of the recycled material.
- Waste paper is dissolved into a paste and cleaned in various stages.
- After the mixing-in of fresh fibres, along with fillers and other additives, pressure and heat are applied to produce new paper.



www.shop-green.lu

Problematic items - chemicals/environmentally hazardous substances



Info

- Always proceed with great care when handling chemical substances.
- Observe the safety-warning symbols and protective measures printed on the label.
- Substances that suppose a hazard to health may be concealed, as is the case with products containing mercury or asbestos.
- Waste containing substances that are hazardous to health should be correctly marked, preferably with the original label.

Saving resources while avoiding waste

- ➔ Use alternative methods or products (such as detergents with the Clever akafen / "Smart Purchasing" label).
- ➔ In the case of pesticides, mechanical means of extermination can be used to replace toxic

substances.

- ➔ Preventive and protective measures can make the subsequent use of chemical unnecessary.

Environment-friendly recycling

- Further treatment or recycling is usually not possible.
- Environment-friendly disposal normally consists of the safe destruction of these products in high-temperature incinerator plants.
- Products such as those containing asbestos-based substances are consigned to special landfill sites.

Useful addresses :

- www.ecotrel.lu



www.shop-green.lu



Information on the resource potential on www.resources-potential.com

Product overview

with information and tips on how to avoid and reduce waste, along with guidelines for proper disposal and recycling



Problematic items - oil, grease/substances hazardous to water and flammable products



Useful addresses :

- www.ecotrel.lu

Info

- Industrial oil, grease and fuel products, and emulsions containing them, contaminate water and soil – and are also flammable.
- In the case of waste oil, just a few drops are enough to render groundwater unsuitable for consumption.
- Edible oils and fats are likewise problematic when disposed of via the sewer system. This also applies to paints, coatings and solvents.
- Proper storage is important, given their flammability and danger to water.

Saving resources while avoiding waste

- ➔ Avoid waste by adopting clean working practices and proper methods of use
- ➔ Use environment-friendly products, such as paints and coatings with the 'Clever akafen' (= smart purchasing) label.
- ➔ Use of recycled products

Environment-friendly recycling

- Products such as oils or solvents are easy to reprocess and if they have been collected under clean conditions.
- Mixtures of mineral oils and solvents, for example, can only be recycled thermally (for energy production).
- A large recovery is possible in the case of waste paint and coatings.



ASSOCIATION KANA BUT LACRATIF



www.shop-green.lu



Information on the resource potential on www.resources-potential.com

Problematic items - gases and pressurised containers



Info

- Lighters, aerosol sprays and modern refrigeration devices contain flammable gases.
- Gas bottles should be handled with great care!
- Lighters and aerosol sprays must not be exposed to high temperatures.
- Many older refrigeration devices still contain CFC coolants, which are harmful to both the climate and the ozone layer.
- Many gases exacerbate the greenhouse effect when released in an uncontrolled manner.

Saving resources while avoiding waste

- ➔ Alternatives to aerosols include the use of compressed-air or pump sprays.
- ➔ Preventing the release of gases likely to damage the climate is of particular importance when handling refrigeration or air conditioning equipment.

Environment-friendly recycling

- Gas bottles can be reused after suitable handling.
- If this is not possible, the residual gas is recycled as fuel and the metal is scrapped for reuse.
- Aerosol containers are predominantly materially recycled
- Lighters and other items that cannot be dismantled are recycled thermally.
- CFCs from refrigeration devices are destroyed.



www.shop-green.lu



Information on the resource potential on www.resources-potential.com



Detailed information can be found in the SDK product dictionary - produktlexikon.sdk.lu

Reverse consumption and Reverse production - how to find the right partner



Individual classification throughout the process - the key to resource-conserving waste management

How do you find suitable partners for the acceptance and further processing of waste products?

A sustainably-minded manager will entrust their waste products to a waste collector that holds all the necessary approvals, guarantees transparent and legally-compliant disposal and can prove that the considerations of the “Circular Economy” are taken into account and are important criteria in their company policy.

In contrast to the saying “Out of Sight, Out of Mind”, environmentally-conscious businesses and institutions are aware of their responsibility, enshrined in law, for the waste they produce from its place of origin through to product receivers and reverse production facilities. The key points here include :

- the legally compliant and safe transport of the substances concerned from collection point to final destination;
- fulfilment of the statutory requirements stipulating that a maximum amount of high-value waste should be recovered as secondary raw materials;
- that all problematic substances should be handled in such a way that minimises their impact on the environment.

Only properly authorised disposal organisations should be engaged for collection purposes. This guarantees that the legal minimum standards applying to the transport and handling of waste will be observed. This also applies to metals or still-functioning electrical, IT and communications equipment that is suitable for reuse. A list of authorised disposal organisations is available at : www.emwelt.lu → Emweltprozeduren → Autorisations, Notifications et Enregistrements → Gestion des déchets et ressources.

In order to make it even easier for businesses to choose a waste disposal partner, SuperDrecksKëscht® has built two tools. Luxembourg-based, authorised disposal organisations also have a seal-of-quality label. They have all been subjected to the strict quality-control stipulations imposed for site operators. These quality criteria include, along with other factors, individual classification and trackable collection from the customer’s premises, the clean and separate storage of products wherever interim storage is required, transparent and trackable processing, the priority of material recycling over use as fuel and the provision to customers of information on how to avoid wastage. The second, Product Potential, makes it possible to measure and compare recycling processes, and therefore makes it possible for the recyclers/product receivers, that waste disposal businesses use when handling the waste products, to accept.

A list of disposal organisations with the seal-of-quality label can be found at www.sdk.lu / Circular Economy / Cooperation partners, by the product receiver with a Product Potential Certificate www.resources-potential.com.



Information on :
sdk.lu

Contact:
info@sdk.lu

The **SuperDrecksKëscht®**
label for cooperation partners



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Aktiounen vum Ministère fir Ëmwelt, Klima a Biodiversitéit mat de
Gemengen, der Chambre des Métiers an der Chambre de Commerce

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geliefte Klimaschutz**

2024 10